

Claims

1. A viewing device comprising:

a pair of substantially inflexible nesting lenses, one of the lenses having a divergent refracting surface and the other having a convergent refracting surface; and

5 means for moving at least one of the lenses in a direction substantially normal to the refracting surfaces so as to create a cleft of changing width between facing surfaces of the lenses.

10 2. A viewing device according to claim 1, wherein the width of the cleft is less than the focal length of the refracting surface of the first of the lenses through which viewed light travels.

15 3. A viewing device according to claim 1 or 2, wherein one of the lenses has a concave surface within which nests a convex surface of the other of the lenses, the cleft being created between said surfaces.

20 4. A viewing device according to claim 3, wherein the lenses are arranged so that viewed light travels through the concave and convex surfaces in that order.

25 5. A viewing device according to any one of the previous claims, wherein the facing surfaces of the first and second lenses have complementary shapes so that when they are brought into precise juxtaposition, the cleft between them is virtually eliminated.

6. A viewing device according to any one of the previous claims, wherein the refracting surfaces are of substantially equal and opposite focusing power.

7. A viewing device according to any one of the previous claims wherein both of the outer lens surfaces are substantially planar.

8. A viewing device according to any one of claims 1 to 6,  
5 wherein one or both of the outer lens surfaces are contoured.

9. A pair of spectacles comprising for each eye a viewing device according to any one of the previous claims.

10. A pair of spectacles according to claim 9, wherein the moving means have a single actuating mechanism common for the  
10 pair of spectacles.

11. A variable focus contact lens comprising a viewing device according to any one of claims 1 to 8.

12. A variable focus intraocular lens comprising a viewing device according to any one of claims 1 to 8.

15 13. An optical instrument eyepiece comprising a viewing device according to any one of claims 1 to 8.

14. A camera viewfinder comprising a viewing device according to any one of claims 1 to 8.